

SCHERMERHORN'S MONTHLY:

FOR

PARENTS AND TEACHERS.

MAY, 1876.

SURVEY OF GEOGRAPHICAL DISCOVERY IN 1875.

LATE EXPLORATIONS IN CENTRAL AFRICA.

MORE than any other region of the globe the African Continent has engaged, of late years, the efforts of geographical explorers ; and exploratory laborers in Africa have been occupied chiefly about the problem of the rise of the Nile, which has provoked and baffled the persistent research of the most resolute and pertinacious travelers, for more than a quarter of a century. The last remaining doubts and questions in the public mind upon this subject have been illuminated by the discoveries of Stanley and Cameron, whose reports afford evidence all but final regarding the river systems of middle Africa.

The opinion that the Victoria Lake was the principal source of the Nile was first advanced by Capt. John Hanning Speke in 1858. In a second expedition, in the company of Col. Grant, that traveler was unable to actually trace the connection between the lake and the Nile. Speke's theory was combated by many objectors, the chief of whom, his former comrade, Capt. Richard Burton, asserted in a controversial book that the Victoria Nyanza was nothing but a group of shallow lagoons, affirming that the real head of the Nile was the Lake

Tanganyika. Stanley's reports of the unity and magnitude of the Victoria Nyanza prove it to be almost unquestionably the main source of the great river. The lake covers an area somewhat greater than the kingdom of Scotland. Though Speke spoke of two rivers emptying into the lake from the south, Mr. Stanley was able to discover but one; it is called the Shimeeyu, and rises somewhere near latitude 5° S., longitude 35° E. from Greenwich, having a course of about 350 miles; this stream seems to be, therefore, the true source of the White Nile. Speke gave 3,740 feet as the altitude of the lake, but Stanley's observations make its elevation 3,808 feet. From the last accounts, Mr. Stanley intended crossing over to the Albert Nyanza to explore that water and trace its connection with the Bar Djebel and the Nile. Speke heard from natives and traders that the Albert Nyanza had a northern outlet which flowed down to the Nile. Baker learned from like sources that the Somerset River, which empties into the lake in latitude $2^{\circ} 16'$ N., issues out again at the northern side, flowing between the countries of Madi and Koshi; he also saw from the mouth of the Somerset River an outlet about 18 miles across, and a range of hills to the west of it; and upon his next expedition he looked up the Nile from Ibrahimia, latitude $3^{\circ} 34'$ N., and saw for twenty miles the lands of Koshi and Madi on either side and a range of hills skirting the valley on the west. There is, however, an incongruity in the accounts of the Nile in Madi and of the Somerset River, which Col. Long describes as large enough to float the "Great Eastern." Marno, also, says that the size of the Bar Djebel at Gondokoro would not lead one to suppose that it was the outlet of so great a lake; he also was told by traders that the lake is fringed by marshes at its northern end, and that the outlet described by Baker was nothing but a creek flowing into the lake.

Stanley set out from Bagamoyo, opposite Zanzibar, the point of exit for several caravan routes, in October, 1874. His company consisted of about 300 African soldiers and carriers, and five English attendants. They passed through terrible hardships upon their march of 730 miles to the shore of the Victoria Nyanza, which they reached toward the end of February, having been 103 days on the way. They were abandoned by their guides at an early stage of the journey; the country was

often so barren and the natives so unfriendly that many perished with famine and fatigue ; many others deserted ; the climate was so sickly that numbers were carried off by dysentery and fever, among them two of the European assistants ; and at one point the band was assaulted by the inhabitants and decimated in a three days' fight ; thus the company was reduced to less than a moiety of its original numbers before its arrival at the lake. Stanley, after following his former route as far as the district Ogogo, then turned more to the northward into a hitherto untraversed territory. After passing over regions of excessive sterility, they entered, in the latter half of their route, a land of springs and brooks, the furthestmost fountains of the Nile. By the village of Vinyata, containing 2,000 to 3,000 inhabitants, they struck the Leewumbu River—this is the name by which the tributary of the Victoria Nyanza is called in its upper course ; farther down, in Usukama, it is named Monangah, and below that, Shimeeyu. It was here that they had the hostile encounter with the natives. Robbery, doubtless, was the motive of the attack. Their first reception by the savages was cool and unpropitious ; who hesitantly entered into traffic with the strangers ; the "Magic Doctor," the chief personage and a sort of ruler in the village, came out with a fat ox, for which he drove an avaricious bargain. The next morning they heard the war-cry, "*He hu, a he hu,*" resounding from all the two hundred villages of the plain ; but did not suspect that they were the object of the hostilities, until they saw warriors gathering about their camp, armed with spears and bows, and arrayed for battle in the feathers of eagles and bustards, and the manes of zebras and giraffes. Treating with the elders through an interpreter, they learned the pretext for the demonstration, an alleged petty theft committed by one of the whites. These departed apparently pacified with a few yards of sheeting ; but the warriors hurried around to the other side of the camp and commenced an attack. The camp was speedily fortified with a rampart of brush-wood. The next morning the enemy appeared in great numbers ; it has since been reported that they were re-enforced by the followers of Seyvid ben Selim, Governor of Unyamyembi. Four detachments were sent out, who drove the enemy before them ; one of these pursued the fleeing savages to a distant plain, where they fronted

about, and slaughtered the troop to a man; another was just saved from a similar fate by timely succor; the other two laid waste many villages and brought back a large booty. The following day the destruction of the villages was completed, and the enemy were thoroughly cowed. In the previously unexplored region north of Mizanza, they traversed a plain of about 2,800 feet altitude, and then ascended in a westerly course, a broad, wooded plateau of about 4,500 feet, mean elevation, which takes in the whole tract between the valley of the Rupi-gi on the south, and the Lake Victoria Nyanza. Entering the valley of the Shimeeyu in Usukama, a rolling country, well-peopled and rich in cattle, they followed the valley down to the village of Kagehyi, situate on the southern shore of the lake, lat. $2^{\circ} 31' S.$, long. $33^{\circ} 13' E.$ During the months of March, April, and May, 1875. Mr. Stanley, in his portable boat, the "Lady Alice," coasted the shores of the Victoria Nyanza, almost entirely circumnavigating the lake. By fixing numerous geographical positions, he has been able to furnish the data for an accurate map of the lake and the country through which he passed. The lake, though a very large body of water, is smaller than it has been represented to be on some of the maps. It contains a number of islands, some of them of considerable size. The supposed Lake of Baingo turns out to be only a north-eastern arm of the Nyanza.

Lake Tanganyika was long supposed to be one of the sources, if not the chief source, of the Nile. The supposition that there was a northern outlet connecting it with the Albert or the Victoria Nyanza was disproven by the exploration of Stanley in 1871, who sought in vain for such an outlet; all accounts of the altitude of this lake, moreover, give it a lower elevation than the Albert Nyanza; its height above the sea-level being, according to Burton and Speke's estimation, 1,844 feet, according to Livingstone, 2,586 feet, and according to Cameron's observations in 1874, 2,711.2 feet. The late explorations of Lieut. L. V. Cameron, of the British Navy, have shown that this lake has no connection with the Nile. Cameron found the outlet of the lake in a mighty stream, which is supposed to flow into the Congo, and whose course is certainly to the westward, towards the Atlantic. This river Cameron followed, 1874-75, over a great part of its course, and he was only pre-

vented by impassable obstacles from tracing it down to the ocean.

Lieut. Cameron was sent out in 1873 by the London Geographical Society with relief for Dr. Livingstone. After learning the fate of the great pioneer, and recovering his records and charts, which he sent home from Ujiji, he proceeded, on his own responsibility, to explore the southern shore of Lake Tanganyika. On May the 3d, 1874, he discovered the outlet of the lake, the Lucuga river, flowing westward. He immediately supposed this river to be a tributary of the Congo, and determined, notwithstanding his poor health and slender resources, and without the authority of the Geographical Society, to follow the course of the stream down to the Atlantic. On the 20th of May, he started down the banks of the river with a few attendants, whom he had brought with him from Zanzibar. For a year and a half nothing further was heard from the adventurous explorer. At last, a dispatch arrived in England from Loanda, where he arrived safely on the 19th of November, 1875. He traced the outlet of Lake Tanganyika down to a new lake; out of which flows another large river in a westerly direction, which he believes identical with the Congo. Following the course of this river for a great distance, he encountered a hostile tribe of savages, and was obliged to change his route. He struck other streams between the Zambesi and the Congo, which he followed down to the sea, coming out on the coast of Benguela. The altitude of the Lualaba at Nyangwé he found to be only 1,400 feet above the level of the sea, that is, 500 feet below the plane of the Nile at Gondokoro. The Luapala, or Lualaba, is three or four miles broad when it issues from Lake Tanganyika. He describes the valley at Nyangwé as of enormous breadth, receiving the drainage of all this part of Africa, and being "the continuation of the valleys of the Luapala and Lualaba." Contrary to Livingstone's report, the river turns westward below Nyangwé, and, according to Arab accounts, southwestward farther down. Another river, the Luowa, runs into it from the north, and farther on it is joined by other large rivers from the same direction. Cameron could not reach the Lake Sankorra, into which the Lualaba flows. He heard this lake was visited by traders who wore trousers, and who came in sailing-boats to purchase palm-oil and dust (*quære*,

gold-dust) in quills. The Luowa was probably mistaken by Livingstone for the upper Lualaba, the upper course of the latter river being much to the westward of Lake Bangweolo. On the route southward from the Lualaba, he came upon a small lake, the Nohrya, which contains true lacustrine dwellings. Contrary to previous suppositions, he found that the Lomâmi and the Kassabé are entirely unconnected. Cameron gives an enthusiastic description of the country through which he passed. Coal, gold, copper, iron, and silver are all found in abundance ; and a rich variety of vegetable productions, nutmegs, coffee, *semsum*, ground-nuts, the *mpafu* (an oil-yielding tree), oil-palms, rice, caoutchouc, copal, and sugar cane, all yield prolifically there. He proposes that a ship-canal, twenty or thirty miles long, be built, which should connect the Congo and the Zambesi systems, thus utilizing with a moderate outlay "one of the greatest systems of inland navigation in the world." Cameron's whole journey was 2,953 miles. Excepting Dr. Livingstone and Silva Porto, he is the only European who has crossed the Continent of Africa between the tropics. He took 400 astronomical observations, and passed through 1,200 miles of entirely unvisited territory, and much of the remaining country over which he went was as good as unknown, having been described only by unscientific and unnoticed travelers.

The results of the labors of our two hardy and resolute pioneers throw a penetrating light into the obscurity which involves the subject of African drainage. Lake Tanganyika and its vast net-work of tributary streams has, it is now settled, no connection with the Nile ; its outflow is certainly towards the west and into the Atlantic, and it seems impossible that this huge volume of water which pours out from it, could find any channel large enough to convey it off, except the mighty river Congo. Lake Bangweolo and the other vaguely known bodies of water west and south of the Albert Nyanza, seem also to be removed out of the category of the conjectural sources of the Nile. The true source of the White Nile is without much doubt to be looked for in the Albert Nyanza—from whose northern extremity it probably issues—which is connected with the Victoria Nyanza by the Victoria Nile or Somerset River, the main and probably sole southern tributary of the latter lake

being the Shimeeyu (=Monangah=Leewumbu), which rises not far from lat. 5° S., long. 35° E. There still remains a possibility, however, that this lacustrine system likewise has no connection with the Nile, but that the great river springs, as the natives have often asserted, from a thousand trickling fountains and purling brooklets. The possibility still remains that the Albert Nyanza, also, has a western outlet which flows down to the Atlantic; a hypothesis which is strengthened by the reported disparity between the upper Nile and the Somerset River, and by the declarations of the inhabitants that the Albert Lake has no northern outlet.

*CONVERSATION AT HOME—A HELP TO
THE TEACHER.*

THE conversation of parents in the presence of their children ranks very high among the formative influences that surround the young. All admit that this is true in respect of moral character; few, probably, have taken pains to consider the relation of such conversation to the growing intellect. Indirect, unconscious influence is not easily measured, and is generally left, as invisible gases used to be, to work ill or good without restraint. But since a wholesome atmosphere is one of the prime conditions of mental development, it is time to weigh, carefully, every element of influence that mingles with those of the school-room, and to ask: What power has this over the success of our work? Are we, as teachers, helped or hindered by the ordinary conversation of the family?

No teacher of experience has failed to mark the difference, in general intelligence, between pupils whose parents are well-educated, and also social, and those whose parents were less fortunate in their early years. This quickness of perception, and readiness to follow up a suggestion of the teacher, have by some been wholly attributed to hereditary transmission and direct home instruction. But they are not invariably, nor, I believe, generally, the mere result of inheritance, much less of domestic teaching.

Mary S., a girl of fifteen, was the daughter of parents who were both well-educated, according to the standard of fifty

years ago, and more than usually intelligent upon general subjects. Mr. S. was consulted on every hand in matters of business, for his judgment and general abilities were much above the average. His wife was also well-known for quickness of perception and fertility of suggestion in social affairs, and as an energetic organizer of work both in and outside of her household. She died when Mary was but five years old, and, during the following ten years, her place at the head of the table was occupied by one of those rare housekeepers who know their business well, and nothing else. She had the gift of silence to such a degree, that the life of this only child—the father's grief and change of life having made him also taciturn—was henceforth developed in a sort of conversational vacuum. At the period when she came under my instruction, I was at a loss to understand her backwardness, in comparison with her associates. She had attended the same school and learned the same lessons with Sarah L., during eight continuous years. She was not inferior to her in natural powers, and usually maintained an equal stand in her class; but whenever there was the least departure from the prescribed task in the textbook, she leaned hard upon the patience of the teacher.

Sarah, on the contrary, was the daughter of parents who had picked up at hap-hazard barely enough education to introduce them to a small world of books and newspapers, yet not enough to conquer a position in the "good society" of a country town. But both of them were ready pupils in the great school of life. They were social and aspiring, ready to talk, and anxious to learn. And learn they did. When I sat at their table and witnessed the eagerness with which they participated in the discussion of any topic that involved new suggestions of knowledge or opinion, I began to suspect why it was that Sarah was a more successful pupil than Mary. Her mind was kept on the alert by domestic incitements. It had acquired a habit of voluntary inquiry. It had been unintentionally stocked with that variety of general information which no regular instruction affords, but which always lightens the labors of the teacher in imparting classified knowledge.

Several years afterward, I had the pleasure of discovering my first gray hair, the occasion being a re-introduction to my former pupil, Mary S., now Mrs. P. I hardly knew the woman,

though the girl's features plainly, almost painfully, reminded me of my former efforts to stimulate her mind. Her mental condition had greatly changed. Her husband, a clergyman of fair ability, had introduced her to a home-life animated by conversation of the best order. She displayed a quickness of appreciation that reminded me of her former companion, Sarah L. She had waked up to a real, intellectual life, whereas, in the old school-days, her mind had simply responded, in mechanical fashion, to the enforced pressure of the recitation-room.

I have not seen Sarah since she left school, but have learned that in her social sphere, which is somewhat in advance of that of her parents, she is recognized as a "wide-awake and useful woman." Certainly, her mind was not superior to Mary's, but certain it also is, to my mind, that Mary's only needed the encouragement afforded by habitual conversation in the home circle, to make it, in every respect, as receptive as her companion's.

The value of conversation as an educator lies not so much in the amassing of general information, as in *increased familiarity* with facts already set down in the memory. The teacher presents knowledge directly, and attempts, more or less, to show how certain truths are related to each other, and to life. But "school-learning" is but a dry catalogue until the child's thought clothes it with living interest, drawn from a perception of its relation to individual and social happiness. The conversation of his elders is continually illustrating to him the real worth of what he has learned. Whatever the father, who moves in the outside world, speaks of as affecting his opinions or his welfare, is looked at from the stand-point of personal or social interest. The facts of history have new meaning, when it is perceived that they bear a more or less intimate relation to father's politics, to mother's recollection of a past generation, to aunt's story or favorite poem. It is only a glance that a boy gets, when something which he has learned in school flashes up unexpectedly, and passes quickly out of sight, in the crowd of miscellaneous remarks; but it is a glance at a fact *in natural position*, at a part of a living organism, rather than at an isolated specimen under a glass case. This glance is a more impressive review, for the familiarizing of the fact

brought to notice, than the periodical questioning of the school-room.

But the chief advantage of much intelligent conversation in the presence of youth, is the *insensible strengthening of the desire* for knowledge. To know enough to understand and share the conversation of one's elders, is a laudable ambition, which, after the earlier years have passed, should be carefully encouraged. The "inquiring mind" is not so much a gift of Nature as the product of habitual suggestion, drawing steadily in one direction. Conversation on a plane just a little above us serves the purpose of the turnips tied to the donkey's head; it keeps in sight the temptation, and is thus a constant stimulus to exertion; but, unlike the device in the fable, conversation continually bestows rewards by the way, and thus avoids disheartening delays, while new incitements spring up in the very path of progress.

The teacher and the school provide the way, but who shall provide the will for learning? Remarks upon the "importance of knowledge," by visiting committees, or by anxious parents, serve but little. The child must feel that importance as the result of his own experience. Until he does, he will not study eagerly. The authority of the parent, and the machinery of the school-room, are not one-half so effective as the spontaneous wish to be admitted to the world that is within sight, but just out of reach.

OCCULUS.

HON. CORTLANDT PARKER, of Newark, N. J., has accepted an invitation to deliver an address before the Phi Beta Kappa Society, of Rutgers College, at the Commencement exercises to be held in June next.

WHEN friction matches were invented a generation ago, phosphorus was a rare curiosity, worth \$20 a pound, and seen only in the chemist's laboratory. It is now made by the ton, drawn out by machinery in ropes that would measure miles in length, and sold for \$1 a pound. There are about fifteen phosphorus factories in the world, most of them in Germany. The quantity produced is over 250 tons a year, about half of which is used in the manufacture of matches.

LOGIC AND USAGE.

IN determining the propriety, or impropriety, of English expressions, there are two schools or methods of grammatical criticism. One school insists that everything shall be subjected to the test of logic, and that if a certain idiom will not bear to be analyzed and "parsed," it must be put down as false syntax. The other school contends that usage is the law of speech, and that, however illogical an expression may appear, if it has the sanction of good writers, it must be admitted as good English. With certain restrictions, this latter opinion is undoubtedly correct.

The advocates of the logical method tell us that there is hardly any solecism which cannot be defended by examples cited from the works of standard authors. The reply is, that occasional deviations from the standard of propriety, into which even good writers fall through carelessness, and which they would not seek to justify on their attention being called to them, are not what is meant when we say that *usus est jus et norma loquendi*. It is the *prevailing* usage, the conscious and *intentional* usage, of polite society, and of leading authors, that must be our guide.

The two schools can be reconciled, by showing that whatever is actually in current respectable use is really grounded upon a good and sufficient reason in logic.

We do not mean to assert that language is always governed by the rules of strict logic; far from it. But a wholly illogical form of expression never could have obtained general sanction. For illustration, take the comparison of the adjective *perfect*. In strictness, this adjective does not admit of comparison, since nothing can possess a higher degree of excellence than perfection. But inasmuch as the purpose of comparison is not to raise or lower the meaning of the adjective, but to indicate that the two objects compared possess the same quality in different degrees, and since we never mean absolute perfection (except when assigning attributes to the Deity), even when we assert a thing to be "perfect," it is possible to conceive of some other thing as approximating more or less to this perfection. Now, this argument, by itself, would not authorize the expressions,

"more perfect," "most perfect;" but finding them in extensive use by all standard writers and speakers, we are justified in using them, and can also find a logical basis for the usage—though the logic is not of the strictest kind.

Again: We are told that "two negatives are equivalent to an affirmative;" and so they are, logically, and according to the modern usage of educated people. But our Anglo-Saxon forefathers, like the Greeks, thought that two negatives strengthened the negation. And they had logic for that, too—not the best logic, perhaps, but logic sufficient to convince them that, if two men are stronger than one man, two negatives must be stronger than one negative. The French have never seen the fallacy of this argument yet, and with them two negatives are absolutely *necessary* (not merely used to give emphasis), except in a few phrases. When the illiterate English-speaker of our day says, "I didn't do nothing," he by no means intends to express affirmation, nor is he understood so to express himself. Two negatives, with those who use them, never do make an affirmative; and it is not illogical to consider them as forming a stronger negative—else what would become of our high opinion of those Greek poets and philosophers,

"The dead but sceptered sovereigns who still rule
Our spirits from their urns?"

It is right to reject a superfluous negative, not because it makes an affirmative, when looked at in a certain way, but because modern cultivated usage rejects it. It is equally wrong to employ superfluous negatives, even when logically they amount still to a negative, as they will do when any odd number of them occur in a sentence. Thus, the man who cried, at the breaking up of a party, "Hasn't nobody seen nothing of ne'er a hat nowhere?" used five negatives, and, therefore, according to the logical school, must have been right. He was wrong, because *polite usage*, not logic, condemns superfluous negatives.

So we see that whether an expression is logical or illogical depends upon the way in which we take it; and different generations, different nations, different classes in the same nation, have each their own logic. As illustrating the same principle,

compare the French way (sometimes imitated in English) of forming the perfect tense of many intransitive verbs with our normal English conjugation. The Frenchman says, *je suis arrivé*, "I am arrived;"—the Englishman says, "I have arrived." The Frenchman is the more logical, but the Englishman is not illogical. Since the participle here denotes the state or condition of the subject, rather than an action, it is more of an adjective than a verb, and *am* is the proper auxiliary. On the other hand, the Englishman, inheriting from the Anglo-Saxon his method of using the auxiliaries, deems it proper to use *have* with intransitives as well as with transitives. The explanation of how we came to adopt *have*, and the French *avoir*, as an auxiliary for expressing completed *transitive* action, is easy and familiar. "It is easy to see how 'I have my arms stretched out' might pass into 'I have stretched out my arms,' or how, in such phrases as 'he has put on his coat,' 'we have eaten our breakfast,' 'they have finished their work,' a declaration of possession of the object in the condition denoted by the participle should come to be accepted as sufficiently expressing the completed act of putting it into that condition."¹ *Have*, thus naturally passing from a principal to an auxiliary verb, in connections where there was an object to be possessed, soon had its functions enlarged by the process of "insensible extension," so as to cover cases where there was no object to be possessed, as in "I have gone." The logician, in such sentences, might ask, "what do you have?" and you could not answer him. It is usage, then, not logic, that justifies the employment of *have* as an auxiliary to form the perfect tenses of intransitive verbs. With the French tastes that came in with the Restoration, many English writers began to use *am* as the auxiliary with such verbs as express state rather than action; but this, although perfectly logical, has never become the law of our language, and is not used by the best writers, except, sometimes, in such expressions as "He is gone," when the participle is a pure adjective, equivalent to *deceased*, *dead*, *absent*. And yet, as we said, our idiom is not illogical, unless it be regarded as illogical to give to a word a force which it did not originally possess; and this we have done in a great many cases; language could

¹ Prof. W. D. Whitney, *Study of Language*, p. 118.

not get along without this "insensible extension." It may be desirable to have a house full of servants; but it is not illogical for the cook to answer the door-bell.

We have shown that an expression may be grammatical without being strictly logical. Let us now establish the converse, viz.: that a proposition may be perfectly logical, and yet not grammatically proper.

Take the sentence, "John and *myself* went to town." The logic here is unexceptionable, and the construction readily submits to the ordinary rules of parsing; yet it is bad English. It is not sanctioned by good writers; and a reason for this refusal to employ it can be given. The compound pronouns, formed by the addition of *self* or *selves* to the personal pronouns, are indifferent as to case-form; that is, they are either nominatives or objectives. When used objectively, they become reflexive, as in "I strike *myself*." When nominative, they are emphatic, and in apposition with the subject, but never themselves subjects; as, "I did it *myself*," or "I *myself* did it." Now, this indifference of case-form renders these words very convenient for those half-educated persons who are puzzled to know when to use "I" and when to use "me." They have been taught to avoid the vulgarism, "John and *me* went," and have fallen into the opposite error of saying "between you and *I*;" when the solecism of this last expression is pointed out to them, their brains become hopelessly confused; and to get their syntax out of its tangle, they cut the Gordian knot with "*myself*." We should not think it worth while to allude to this point, did we not sometimes hear "between you and *I*" from the lips of persons moving in what is called "good society;" and expressions like "John and *myself* went," are frequently used without the slightest suspicion that they are barbarisms. We once heard even a teacher, in correcting a pupil for saying "Mary and *me* went," substitute "Mary and *myself*."

A word never exists in a language unless there is a reason for its existence—*raison d'être*, as the French say. Now, the true *raison d'être* of "myself" is, that it is needed as an emphatic appositive, and as an object of reflex action; it is needed for no other function. To use "myself," when *me* or *I*, according to the construction, could be put in its place, is a con-

fession of that haziness of knowledge which cannot distinguish between subject and object, and which, for this reason, avails itself of an indifferent case-form. But this is not valid *raison d'être* for a construction; the English-speaker should *know* what case is required, and use it accordingly. Good writers never use the compound personal pronouns as subjects, joined to other subjects by conjunctions. This *fact* is the law of the language; the *logic* of the fact is explainable by the principles which we have stated. It should never be forgotten, that the first thing to be done in grammatical discussions is to ascertain what are the facts of the language—that is, what expressions are sanctioned by the prevailing usage of good authors. *Then* may come the investigation of the logical principles upon which these usages rest.

Directly opposite usages may each have logical ground to stand upon. Thus we say, "I fear that the enemy *will* attack us;" the Romans said, meaning precisely the same thing, "I fear that the enemy *may not* attack us." Each of these constructions is logical, and each is correct in its own idiom. The Englishman prefers to view the coming of the enemy as the *object* of his fear; the Roman chose to regard the same event as something to be avoided, and so uses language indicative of a *negative purpose*: "I fear (take precautions), in order that the enemy *may not* come." Which idiom is preferable, different nations decide differently. But both are logical; and hence logic cannot be a guide for us in determining constructions.

We give a few more instances (without stopping to explain them) of expressions which are bad English, although logical. Nothing could be easier than to parse the italicized words in the following sentences: "He is not *as* tall as I;" "he is the same man *whom* you saw yesterday;" "he was the first *who* came;" "Satan, than *who* none higher sat," and yet the only correct English for these expressions is, "he is not *so* tall as I;" "he is the same man *that* you saw yesterday;" "he was the first *that* came;" "Satan, than *whom* none higher sat."

We are now ready to examine a series of constructions which have given rise to much dispute, and for the proper appreciation of which all that we have said thus far has been intended as preparatory. We refer to the idiomatic constructions, "I

had *as lief* go as stay," "I had *rather* go," "you had *better* stay," etc.

Many critics condemn these expressions, because they cannot "parse" them; they seem to them illogical. Those who justify these idioms content themselves with appealing to "usage"—at least we have never seen any attempt to treat them otherwise than as anomalies. Neither party admits the standard of judgment set up by the other; the logicians will not yield to the authority of "usage," and the advocates of usage will not consent to be reasoned out of the use of expressions sanctioned by a host of excellent authors.

We first remark that, the *fact* being admitted of the prevalence of these constructions, there *must be a logical principle* underlying them, although it may not be easy to discover. Grammar is an *inductive* science, and its rules are derived, not from the theories of grammarians, but from an analysis of the actual modes of expression current among good writers. We may be sure that expressions so sanctioned will always be found to be based upon some sound philosophical principle; but it is an inversion of the proper order of investigation if the grammarian *starts* with a principle, and rashly condemns all constructions that seem to be at variance with it. There may be some other principle which will explain these apparent anomalies; and it is his duty patiently to investigate, not to dogmatize.

Without claiming to possess any extraordinary faculty of grammatical insight, we hope to be able to show, in our next article, that these idioms, *had as lief*, *had rather*, etc., are not anomalous, but are grounded on a logical principle, and a regular usage of our language.

C. S. DOD.



LIEUTENANT CAMERON, who has lately succeeded in crossing the African continent nearer the Equator than any other explorer, pronounces the interior a magnificent and healthy country of unspeakable richness. He is confident that by a canal, a few miles in length, connecting the Congo and the Zambesi, one of the greatest systems of inland navigation in the world might be opened, and soon made remunerative.

THE TEACHING OF READING.

IN the course of studies laid down by every City or Town Educational Board, reading occupies a very prominent place. It is continued from grade to grade, and is required from the time the child enters the infant school, at six years of age, until it leaves the grammar school, at fourteen. That is to say; during nearly eight years of the child's school life, a large portion of the time is given to reading from a school-reader. To accommodate the want springing out of so many years' attention to this branch, we have readers of all sizes and numbers, from the Primer up to the Sixth, finishing, perhaps, with Additional High School Readers, Young Ladies' Readers, Rhetorical Readers, Historical Readers, and the like. It is of course a very gratifying demand in the eyes of school-book publishers, and their authors, and it is not without interest to printers, paper makers, as well as book-binders, and those industrious chevaliers, the school-book agents; for there is no book that is thumbed more steadily than the school-reader; it is carried constantly to and from school, is exposed to all sorts of weather, and wears out with a rapidity satisfactory enough, one would suppose, to the maker and the vender. Of the importance of the reading school-book interest, one may form a small idea by noticing that the copyright on two series of readers by one author, paid to him for several years in succession, was over twenty thousand dollars per annum. What the profits were to the publishers, is an unimportant question, but the annual cost to the community can be ascertained approximately, by supposing the author's copyright to have been ten per cent., and the whole cost to be two hundred and eighty thousand dollars per annum. What proportion this sum bears to the gross amount paid for all the reading-books issued by school-book houses throughout the country, it would be well nigh impossible to say, but that amount must be very great. All this is only a part of the annual payment by the community to teach our children to read, for to it is to be added a portion, not inconsiderable, of the salaries of teachers to instruct in reading, as well as a moiety of the cost and repairs of school-houses, and accompanying expenses. This, could we give it, would represent

the price in money, paid in the United States to teach our children to read.

The cost in time is quite another matter, and could not be represented by any parade of statistics. But the inquiry is pertinent: What does the community obtain for all this outlay of time and money? There is no question that reading lies at the basis of mental culture. It was the young stone-wall mason, afterwards a distinguished mathematician, who, surprised reading Virgil during his dinner hour, said to the wondering gentleman, "Does a person need any other teacher, when he has once learned to read?" And the question is true enough, for what cannot any one hope to accomplish, who has truly learned to read? The word "Truly," naturally introduces a few thoughts that appear to us of some importance.

The learning to read has two objects. The first is utterance; the second is the acquisition of knowledge to obtain the former object. The child is taught to distinguish and pronounce the words, and to utter them as they appear in sentences, or, as it is sometimes called, connected discussion. As a part of this, he is taught the management of the voice, in pauses, in emphases, and the other graces, that give effectiveness to delivery.

It is to the training on utterance that the chief attention of the schools is mainly directed, through these eight years, and for the attainment of this is annually made freely, not grudgingly, the magnificent expenditure for books and teaching. Does it meet with such a return in this particular, as the community have a right to expect? Is every boy or girl, at fourteen, who has attended a public school regularly from the infant class up, a reasonably good reader, an agreeable reader, one whose words come out with fluency, and who is reasonably free from faults in inflection, emphasis, tone, and of excessive slowness or rapidity? We do not speak of finished readers, with the graces of the platform, the reading desk, or even the stage, but pleasant, agreeable readers for the family circle or the bedside of the convalescent or infirm. Is there even a goodly proportion of the pupils we have spoken of, who have reached this point? And, if there is not, what is the cause of this, and is there a remedy? Those who have had a wide experience, as superintendents and school visitors, say that there is a great difference between boys and girls of the same age in

reading, and that this difference is greatly in favor of the girls. This may be partly explained by the huskiness of the boys' voices, when they are nearing the age of fourteen, and the want of pliancy in the organs of utterance; but it does not account for the difference between the two sexes, say from eight to twelve years. In the region of New York City, there can be little question that the girls read better than the boys, whatever may be the reason. Nor can this arise from greater skilfulness in teaching, for equal skill is shown in the schools of both sexes; certainly there is not less painstaking with the boys.

The answer given by the teachers to the general complaints about the reading is that there is not time enough devoted to the subject; that the classes for the most part are large; that even in an hours' recitation—and no recitation is one hour in length—a class of fifty could not be given one minute a piece, because a teacher must stop to illustrate, to praise, to criticise, to encourage; that in truth not more than twenty-five children could be, even slightly, trained during a single recitation. They complain, besides, that there is a lack of interest, when children have re-read the same piece in a reader a dozen or twenty times, perhaps—not a few of these pieces, moreover, having no special interest for them, to begin with. In addition to all this, they say that in a graded course of instruction, the evil arising from want of interest is made worse by dividing the reader into portions, each of which is set apart as the reading for the grade for a term of five months, and within this they must circulate like a horse in the mill, because, too, they are held responsible for the spelling and definition of the words gone over in the reading.

There is a good deal of force in these objections, which the complainants against the present results in teaching, would find difficulty in overcoming. We are inclined to think that the fault lies in the system, far more than in the methods pursued under it. So long as any course of studies limits the pupils to the lessons in the reading book, we shall have poor readers. Good enough they may be in the lessons repeatedly read in the class-room, under the eye and after the model of the instructor, but poor readers, the moment they are set to reading another book, a magazine, or a newspaper. Not a few thoughtful

persons have long held the opinion that the true test of a pupil's ability to read does not lie in their reading glibly from a reading-book. It is easy enough to train a class of moderate size, to read a given number of reading lessons during five months, and to catch the very tone and manner of the teacher. The reading may even rise so high as to be called "stylish," but the style will vanish, the moment the children are set to read a simple story they have never read. A valued friend, Mr. A., at one time took lessons from an English-Irish elocutionist, a most skilful instructor, as his letters avowed, who had trained even members of the House of Commons, and one knows not how many of the nobility besides. After a preliminary training in trying to form a breast voice, the elocutionist put our friend to reading Byron's Monody on the Death of Sheridan. The two went over it in repeated lessons line by line, and sentence by sentence. After their labors in this way had been concluded, and Mr. A. had been allowed to test the strength of his new elocutionary wings on the entire piece, he found, to his surprise, that while he had obtained some tolerably useful hints on the management of the voice, and had gained a reasonable mastery over the delivery of the "Monody," he was, aside from these slight advantages, in really no better condition to read other compositions than when he began. He could imitate the elocutionist so far as that personage went with him, but he could go no farther, and so, the costly instruction soon after came to an end.

It is a noticeable thing, that pupils who enter the public school from private instruction, or from purely home training, are very often found to read more simply, more intelligently, and therefore more naturally, than those trained entirely in the public school; and it has been noticed also that pupils who so enter, are very apt, after a while, to lose this simplicity, and to fall into a mannerism and certain faults of utterance from which they were, previous to entering, quite free.

Wherever there is reasonably intelligent and careful attention at home to the reading of the children, that is to say, if they be required to read aloud in books that are likely to interest them, the work of the class-teacher becomes of secondary value, and it is very doubtful if any good reading, in the best sense, can be obtained without something like this. Parents and

friends can afford to dispense with "style," on a few set pieces, if they find that their children can take any simple scrap of reading, and read it with tolerable attention to the pauses, which is as much as to say, that they understand what they are reading.

If then the efforts of school-officers and teachers were directed towards removing these two great difficulties, the complaints against the present results in the teaching of reading might possibly cease. The pupils do not read enough, and what little they do read is without variety, because constantly re-read. If the interest we take be the measure of our success in so much that we do, it is surely true in reading, where so much depends on our interest. And it is far more true of children than of adults; for the young mind is so difficult to catch, and so hard to hold. It seeks novelty, and if it does not find it on the printed page, when reading is the only object, it might nearly as well have a blank copy-book before it. Considered even as mere mechanical training, reading is not the mere pronouncing of words, however correctly this may be done; it is the uttering of words arranged in sentences to express thought. To train a child to read intelligently and agreeably, therefore, we must steadily bring him face to face with new combinations of words, with new forms of sentences. In doing this he slowly learns to catch the form of the sentence, and to grasp its meaning at a glance. Simple forms should be used at first, the more difficult at a later stage. To suppose that this can be done with the present amount of time devoted to each pupil, and with the existing slavish adherence to a limited portion of a reading book, appears so ill-judged that the mere mention of it should be enough to make us change to something better.

The teacher's work is well done, if distinct articulation and correct pronounciation are attained, and some general rules for emphasis, pitch, and proper pauses, are thoroughly enforced. All the rest comes from constant practice by the pupil, not on the same pieces, as has already been said, but on new matter carefully selected so as to offend no prejudices, religious or political, on the part of parents, examples of good taste so as to improve the child's mind, and suited by simplicity to the grade. To do this, one book at a time is all that is necessary. It can be passed from hand to hand. The teacher's attention

equally with that of the pupils will be directed to each successive reader, and the interest will be increased by the teacher's occasional reading of a sentence. Nor would this interfere with the selections in the reading-book. That would still retain its usefulness, but it would cease to be the main reliance. The further utility of some such plan may possibly be made more apparent in a succeeding article, when we come to consider the second great object of reading, namely: The acquisition of knowledge, and how far this ought to enter into school training.

DAVID B. SCOTT.

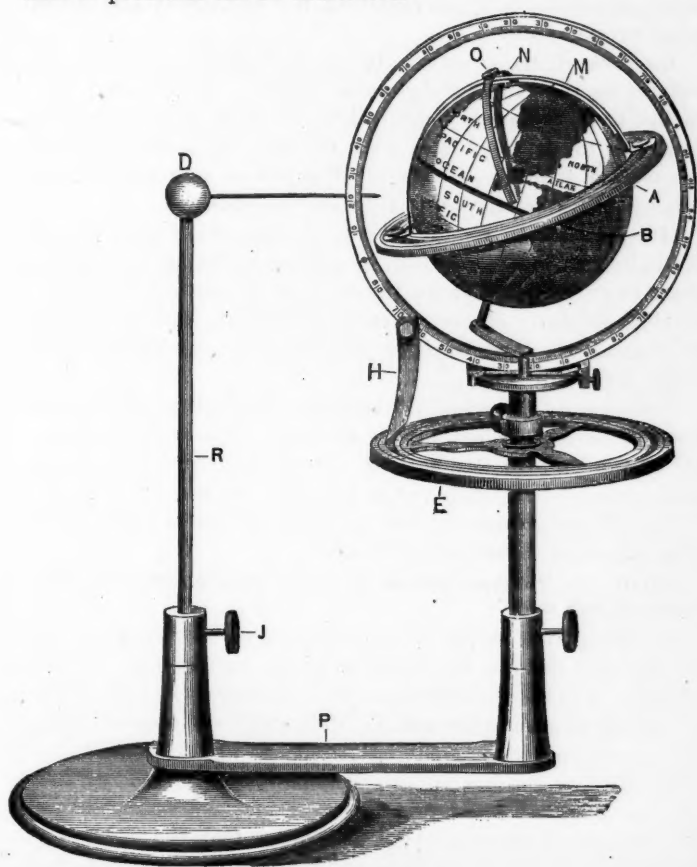
MANUAL LABOR A PART OF EDUCATION.

WHILE I do not think that bodily labor is especially desirable for its own sake, I think any scheme which leaves physical education out of the account, is radically defective. If you can have this with training in useful arts, so much the better; but have it we must. There was a training in those primitive New England times when a fellow had to lie down to his Lindley Murray before a fire of pine knots, after milking the cows, cutting the wood, and doing the "chores;" when the girl added the daily skein to the festoons of yarn for the family clothing, which is hard to get in these days. As soon as a child was old enough to pick up a basket of chips, it became an element in the productive wealth of the home. Surely it was none the worse for it to be taught, by the statutes of law and filial duty, that service was due for the care and support of its helpless years. These views may seem sordid, but the looseness with which children grow up to think their parents and the rest of the world owe them a living, is filling our streets with hoodlums and with animated fashion plates, ready to be blown away by the first ill wind of temptation. What is a hoodlum? A boy gone to waste, rotten before he is ripe, because society does not know enough to preserve and economize him.—*Prof. Carr.*

ILLUSTRATIONS WITH GLOBES.

DR. M. MACVICAR'S LESSONS ON GLOBES. II.

IN the previous article, some of the special uses of the circles of illumination and twilight were presented. In this, the globe is presented, with these circles removed, and three new parts introduced, viz. : an horizon, a semi-prime vertical, and a semi-meridian. By the assistance of these, a totally different class of problems can be illustrated.



CUT No. 4.

In the following description of parts, the new ones introduced are the only ones presented. Reference can be made to the former article for the others.

In Cut No. 4, A represents the horizon. It consists of a thin brass ring, having on its face the series of graduated concentric circles given on the ordinary "wooden horizon." It is attached to the revolving brass equator, B, by two screws, on which it turns freely from north to south. By means of this motion, and the motion of the revolving equator, it can be made, instantaneously, to represent the horizon of any given place on the globe.

B represents the equator. It is a graduated brass circle, revolving on the axis of the globe as a centre. The horizon is attached to it, as already described, to which it gives a motion from east to west, and from west to east. It is also used in connection with the circles of illumination and twilight, in solving problems relating to time and longitude.

M represents the semi-meridian. It consists of a graduated semi-circle of brass, attached, by screws, to the horizon, 90 degrees from the point where the horizon is attached to the revolving equator. Hence, wherever the horizon may be placed, this semi-circle passes through the pole, and constitutes a universal meridian.

N represents a semi-prime vertical. It consists of a semi-circle of brass, attached, by the screw, O, to the semi-meridian, M, at the pole of the horizon. It revolves on the screw, O, and can be placed parallel, or at any angle, to the meridian, M.

The following examples will show the method of using these attachments in illustrating problems.

PROB. X. *To show that the earth revolves on its axis 366 times, in 365 days.*

Set the horizon for any given place, and revolve the globe on its axis until the sun, D, is vertical to the eastern side of the horizon. Let the globe now remain stationary on its axis, while it is revolved around the sun, D. The pupil will observe; that, the axis of the globe remaining parallel to itself, the meridian and horizon of the given place must make, with reference to the sun, one complete revolution westward, for each revolution of the earth round the sun. Hence, in order that the sun cross the meridian of the given place 365 times in the course of one

revolution of the earth around the sun, the earth must make 366 revolutions eastward, on its axis.

PROB. XI. *To show the part of the celestial sphere that is not seen from any given point on the earth's surface.*

Set the horizon for the given place, and let the pupil observe, that, if the place is north of the equator, the horizon is as many degrees from the south pole as the latitude of the place. Revolve the globe now on its axis, and let the pupil observe, that the southern point of the horizon describes a circumference, which bounds the part of the celestial sphere that cannot be seen, and, that the radius of this circumference is as many degrees as the latitude of the place.

PROB. XII. *To show that the east and west points are the same for all places on the same meridian.*

Fasten the semi-prime vertical at right-angles to the semi-meridian, and set the horizon for a place on the equator, and the pupils will observe that the east and west line, which is always at right angles to the meridian of the place, is, in this case, parallel to the equator.

Move the pole of the horizon slowly north, and let the pupil observe, that, in whatever position the horizon is placed, the prime vertical, or east and west circle, cuts the equator at the same points. Hence, the east and west points are the same for all places on the same meridian.

PROB. XIII. *To show that when the sun is vertical to the equator, he rises due east, and sets due west for all latitudes.*

Set the horizon for any given place, and let the pupil observe, that the prime vertical, or east and west circle, and the horizon cut the equator at the same point.

Move the pole of the horizon to other places on the same meridian, and the pupil will observe, that the east and west circle and the horizon cut the equator at the same point for all latitudes. Hence, when the sun is vertical to the equator, he must cross the horizon, or rise and set, for all latitudes, at the east and west points.

PROB. XIV. *To show that the sun rises north of east, and sets north of west, for all latitudes, when he is vertical to any point north of the equator.*

In illustrating this problem, pursue the following course;

1. Set the pointer opposite June 21st, and set the horizon

for any place on the equator. Revolve the globe on its axis, and the pupil will observe that, because the horizon cuts the equator at right angles, the sun must cross it, in rising and setting, $23\frac{1}{2}$ degrees north of the equator; and, hence, rises and sets $23\frac{1}{2}$ degrees north of east and west.

2. Set the horizon for a place about fifteen degrees north of the equator. Revolve the globe on its axis, and let the pupil observe, that the horizon cuts the equator and the circle, to which the sun is vertical, obliquely, and, consequently, the sun must cross the horizon, in rising and setting, at a greater distance from the equator, measured on the horizon, than before; and hence, must rise and set farther north, as the horizon and east and west circle cut the equator at the same point.

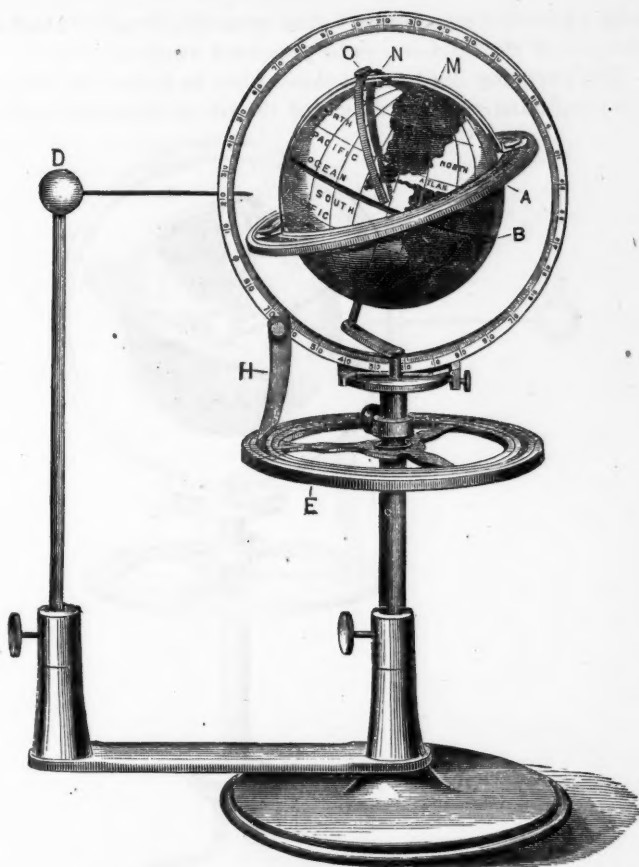
3. Set the horizon for higher latitudes. Revolve the globe on its axis, and let the pupil observe, that the higher the latitude, the more obliquely the horizon cuts the equator. Hence, the farther north the sun must rise and set.

4. Set the horizon for a place within the Arctic circle. Revolve the globe on its axis, and let the pupil observe, that now the horizon does not cut the circle to which the sun is vertical, and hence the sun is visible all the time. Let him also observe, that, when the sun is due north, he is nearest the horizon; and when due south, he is farthest from it. Hence, he appears to ascend in moving from north to south, and to descend in moving from south to north.

5. Set the horizon for the pole. Revolve the globe on its axis, and let the pupil observe, that the sun appears, in this position, to revolve round the earth parallel to the horizon.

The relation of the rising and setting sun to the east and west points for any day in the year, and for any latitude, may be illustrated in the same manner.

Cut No. 5 presents the globe with the same attachments as Cut No. 4, but arranged so as to give the apparent annual motion of the sun, instead of the real motion of the earth. Either the arrangement here shown, or in Cut No. 4, can be used for illustrating the same problems. It is a great advantage to both teacher and pupil, in many problems in which a globe is used, to be able to present things as they appear to be, and, also, as they are.



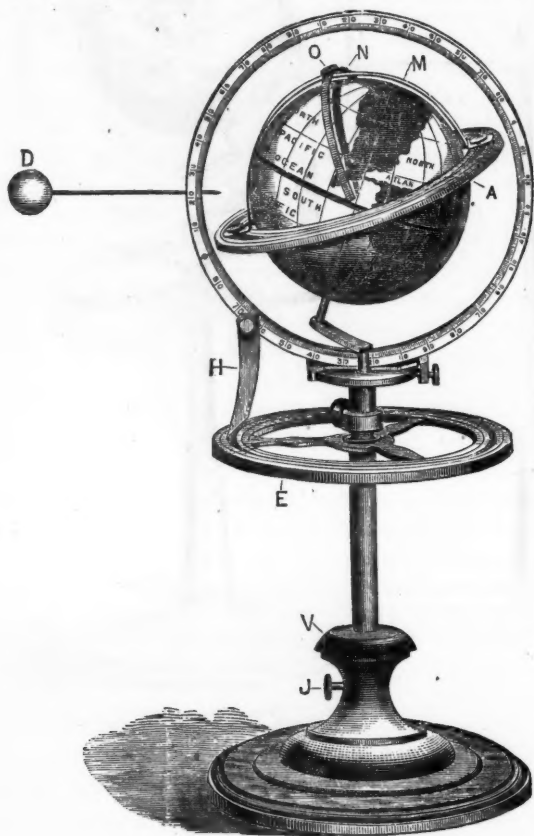
CUT NO. 5.

The following Cut presents the globe, with the same attachments as described in connection with Cut No. 4, except the arm P, with its wheel-work and rod, R.

The globe constructed without the arm, P, or tellurian attachment, but having all the other parts, as shown in Cuts No. 3 and 6, is in many respects, as stated in the former article, more convenient for class-room work than the other form. The real motion of the earth in its orbit is the only illustration that cannot be given equally as well with a simple globe as with one

with a tellurian attachment. And even this, by a little tact on the part of the teacher, can be presented nearly as well.

The foregoing illustrations present but an imperfect view of the simple and practical nature of the Globe described, and of



CUT No. 6.

the ease and clearness with which, by its aid, the most intricate problems may be illustrated. It is only necessary to see the globe to appreciate this fact fully. It is not stating the case too strongly, to say, that, by its use, a pupil will acquire, in a few hours, a more correct and comprehensive knowledge of the ele-

ments of mathematical geography and astronomy than by weeks of hard study, where the ordinary devices for illustrating these subjects are employed.

The following are some of the excellencies of the globe, which will be appreciated at once by all teachers :

1. The attachments are so constructed, that in every illustration the globe represents the real position of the earth.

2. Every part is so made, that it can be readily removed. Hence, the teacher, in every illustration, can attach or remove any part that will assist the pupil to understand more clearly the problem presented.

3. On account of the motion of the equator, and hence the readiness with which the horizon can be set for any given place, any problem on the terrestrial globe can be solved much more easily and clearly than with a globe mounted with an horizon, in the ordinary manner.

4. By a few simple devices that can be placed on the globe at pleasure, a wider range of problems can be illustrated in a more clear and philosophic manner than by the use of both the best wooden horizon globe and a tellurian.

5. It unites in one apparatus, in the most convenient and substantial shape, and at much less expense, the best form of tellurian and the best form of globe.



The gas-wells of Pennsylvania have been described as the greatest waste in the world. The Burns well, five miles from Pittsburgh, has a tube five-eighths of an inch in diameter, through which passes fully 1,000,000 cubic feet of gas an hour, weighing upwards of fifty-eight tons. It is therefore yielding over fourteen hundred tons of gas a day, equivalent in heating power to twelve hundred and fifty tons of the best anthracite coal, or as much charcoal as can be made from five thousand cords of wood. Properly applied, it would smelt seven hundred tons of pig iron a day. Ten wells like the Burns would supply carbon enough for our entire production of iron, 2,600,000 tons a year. There are some thousands of blowing wells in Pennsylvania, and already several large iron mills are using the gas as fuel.

ECONOMY IN SCHOOL MATTERS.

TIMES are never so hard that it is good economy to reduce the quality of instruction in the public schools. That is always done when cheap teachers are employed, or when good teachers are overworked by cutting down the number of competent assistants. We are sorry to see that the appropriations for educational purposes in Chicago are this year reduced one-third, and that Detroit is about to do the same ; also, that in Kansas the Legislature has discontinued the appropriation for Normal Schools. America, of all countries, cannot afford to save money in this direction, since ignorance is an expense which only the most oppressive taxation by a despotic government can long sustain.

There is, however, in many cities, an opportunity for retrenchment which the times imperatively demand. The erection of showy and costly buildings is not necessary to the maintenance of educational privileges anywhere. Not until a sufficient number of competent teachers are well-paid, and well supported in their labors by a generous equipment of apparatus ; not until the most approved practical facilities are provided without stint, should the public money be used for imposing architecture. Economy, rigidly maintained in this department, would go far to relieve the pressure upon the public purse without sacrificing the precious interests committed to the school system.

*GIRLS' BOARDING-SCHOOLS.*

FOLLOW your nose !" We had asked one of the oldest and most famous of New York teachers, after arranging to put our boy under his care, where he would advise us to place the boy's sister. "Follow your nose !" said he. We asked an explanation.

He replied : " The most of the managers of girls' schools are not intelligent enough to know that pure air is necessary to health. Here and there one may be. Let that guide you. Find, if you can, a school where the principal knows enough

to ventilate her school and recitation rooms, and secure, at least, warmth and *pure air* for your daughter."

There should be common sense enough to see after two things, which in many schools for girls are little considered—fresh air, and enough to eat.

And it is positively the case that in many a school, where all the "accomplishments" are taught by "Monsieurs" and "Madames," "Signors" and "Signorinas," "Herrs" and the like, especially if under female management, there is not intelligence enough to keep the room warm and ventilated, and sometimes there is meanness enough to increase the revenue by half-starving the pupils.

It would not be believed were it not so well attested, that, in a country like ours, young women and growing girls actually often go hungry in boarding-schools—and high priced boarding schools, too! It used to be a tradition universal about girls' schools in England. And the tradition went on sufficient facts. The experience of the Bronte Sisters at Lowood was not uncommon. And the business seems to be hereditary, somehow, in schools for girls.

Of course, no one would advise luxuries. But surely every parent should insist that his daughter should have a sufficiency of wholesome, plain, well-prepared food; and it ought to be a primary question in all cases, in examining the character of a school. In the hands of an energetic, managing, money-making woman, at the head of a school, a half-hundred growing girls stand a fair chance of keeping Lent longer than the Canons require, and more strictly than is good for their health or temper.

The late venerable and revered Bishop Kemper used to tell, with a certain enjoyment, an experience of his own at a young ladies' school he was once invited to visit. The invitation was to breakfast. The Bishop sat down with the lady principal and teachers and some older pupils, who, for good conduct, were given the honor of a seat at the table with the bishop—fourteen in all. There was one small mackerel on a dish before the principal, and so skilful a carver was the lady, that she helped the table all around from this wonderful fish, and astonished the bishop by begging to be allowed to help him a second time!

Very generally, outside young ladies' schools, we have outgrown the superstition that it is "not genteel," indeed, "quite unladylike," for a girl to have a good appetite, and to eat as becomes the possessor of such a blessing. In some such schools the superstition lingers yet, and is encouraged. It is not an uncommon experience that a girl's health is seriously impaired by the genteel starvation to which she is exposed by the scanty and unwholesome and carelessly-prepared food of a boarding-school, in the critical period of opening womanhood.

What is the moral of it all?

Only that parents should not take everything for granted. That they should be at the pains to examine the homes to which, for some years, they may be committing their daughters. That they should not be imposed upon by Signoras, and Herrs, and Monsieurs, "Professors" of this or that, but should inquire how their children are to sleep, whether they will have fresh air to breathe; and food enough to eat, so that actual hunger will not compel them to devour at night surreptitious pickles and contraband cake, when they ought to be sleeping the sleep of the just.—*Church Journal*.



ART EDUCATION IN MASSACHUSETTS.

WALTER SMITH, the State Director of Art Education in Massachusetts, replies, in the *New England Journal*, to some strictures in the *Nation*, upon the method of study adopted by him in the schools of that State. He thus sets forth his own views of the situation, which have led him under the guns of the *Nation's* critic:

"I saw very clearly that these schools were no place in which to begin a vague, indefinite, or sentimental course of instruction; that if drawing was to become a subject of general education, and be taught in public schools like other studies, and by the regular teachers, it must needs be arranged on a teachable, scientific basis, with all its principles capable of being demonstrated scientifically, according to sound methods of instruction; and accordingly I endeavored to arrange the course of

study which I found it my first duty to prepare for these schools on this common-sense idea."

He then explains his method specifically, a method which begins with the forms of plane geometry, and proceeds to the drawing of simple ornaments based upon them; thence, to the study of plant forms and the principles of decorative design; thence, to exercises in solid geometry and the elements of perspective; thence, to the general use of natural forms, and instruction in the principles of light and shade; and thereafter, in wide range, includes analysis of styles of ornament, design applied to industrial purposes, mechanical and machine drawing, architectural drawing, figure and landscape drawing, foliage from nature, with special instruction in such features of manipulation as drawing with the crayon, brush, stump, etc.

Mr. Smith remarks, in explanation of this generally approved and by no means novel system: "I do not believe that we can have any real art-culture among us until we have laid its basis in a thorough knowledge of practical geometry, and of scientific principles as applied to art. I know it is a pleasing theory that drawing should begin with the study of nature, and of the works of the great masters; as though children could begin their elementary studies where the great masters left off, or be able to cope with nature's secrets before they have learned to understand her simplest work. In the method I have adopted, there is not the slightest bit of mystery in any of the stages, nor anything but what all children capable of mastering the ordinary branches of education can do. I admit it does not embrace instruction in 'fine feeling' nor 'æsthetic culture;' nor is there a 'moral element' in it other than what comes from doing intelligent work in an honest manner—for it has been my special aim to keep all sentiment out of it. Drawing being a means of expression, I would have pupils make use of it to tell the truth at all times, and under all circumstances; and this they cannot do, if they are ignorant of its scientific principles, and have to rely upon uncertain 'feeling.' It is a prevalent notion that, although the technical details of a work of art may be wrong, the general effect may somehow be right. I don't believe in that theory. In short, learning to draw I regard as a task, as something involving real work—no more nor less than is in-

volved in other branches of education, but work, nevertheless."

The champion of sentimental art in the *Nation* utters his dictum in the following language:

"The objects of mechanical drawing and of drawing for purposes of artistic expression, are not to be reached by the same processes. They have little in common except the use of the same materials. * * * The training of hand and eye required in each of them demands essentially different methods, and to suppose that good instruction for the one end is equally good for the other, indicates a thorough confusion of ideas.

* * * It is true, that most designers require to know certain mechanical processes, but, as designers, they require training of a purely artistic kind, which cannot be provided unless the mechanical element be kept out of it. * * * Mechanical drawing has nothing to do with art proper. Art is always a form of individual expression, and, if we would apply 'art to industry' we must be careful to use the methods which 'art' requires. * * * Art instruction is properly directed towards purely æsthetic culture alone—æsthetic, that is, in the sense of the term which includes a moral element."

To this the director answers with a counterblast of quotation from such highly respectable authorities as Albert Dürer and Leonardo da Vinci, and from various reports of successful art schools in Europe.

Doubtless citations may be made from authors of high standing in literature and art in support of the *Nation's* vague theories. There is no subject upon which more of high-sounding and plausible nonsense has been bestowed than upon the study and practice of art. Very few writers have been able to confine their criticisms within the limits of their personal comprehension. Men who are above affectation in manners, and who never make unfounded pretensions in the ordinary departments of learning, do yet often assume to understand principles in art which they have never studied, and to make just application of them to work in which they have had not even the beginning of experience. They therefore fall into the vulgar habit of mistaking other people's opinions for their own. Considering the ease with which all of us do the same, this might well be pardoned, were it not that they also most absurdly mis-

apply this second-hand wisdom. A man shall go with you into a picture-gallery, and, rather than be content with simply expressed admiration of that which he has the capacity to enjoy, he will impose upon you a criticism, couched in stolen phrase, and pregnant with truth which he does not understand. You can endure so much; but when he proceeds to dilate upon art as something vaguely superior to the rules which govern intelligence, industry, and skill in other departments of human endeavor, you must either distrust him or make a fool of yourself by following.

It is certainly true, as the *Nation* writer maintains, that there is a broad difference, in training and purpose, between the practice of mechanical drawing, pure and simple, and the methods required as a preparation for artistic design and execution. Instrumental drawing by itself could never make an artist. Too much practiced, it would mar one, however eminent. But it has its place in elementary training, and has as much "to do with art proper" as stairs have to do with the upper story of a house. Art instruction that should be, in accordance with this writer's assertion, "directed towards purely æsthetic culture alone," would develop a school of incapable amateurs. The wise man of the *Nation* would admit that the severest and most scientific analysis of principles, and practice of rules (which are, in a sense, mechanical), and the most patient devotion to the drudgery of manipulation, are absolutely necessary as preparatory discipline to artistic skill. But geometry and other exact sciences underlie the freest manifestations of nature, and the artist who recognizes this fact, and is most familiar with its true relations to the production of form, color, size, and proportion, will, other things equal, be most successful in creating things of beauty to be a joy forever.

We do not suppose that Director Smith expects to make artists or artisans of all the school-children of Massachusetts, but we think that he has adopted a common-sense method of elementary training, which will impart sound principles and initiate correct habits, so that the door will be wide open, in any case, for the *Nation's* "moral element" to have free course, and "individual expression" to be glorified in worthy form.

WOMEN'S READING.

I WAS once much astonished at being asked if Shakspeare had written a *new* poem. The inquiry came from a lady who was trying to remember the author of an extract which she had recently read. The question was asked seriously, by a person whom I had always supposed to possess average abilities and education. Subsequent inquiry showed that she had attended school until the age at which girls usually graduate, and that since that time—some twenty years before—she had very rarely read a book or a newspaper. I was not at first quite satisfied that that was the cause of her dense ignorance, but I have since become convinced that it was. A person can forget a great deal in twenty years. A girl may have a fair idea of history, but, after a time, unless she replenishes her stock of information, it gets low. She has, at length, a confused idea that Cortez, the grandson of Charlemagne, fought against the King of Dahomey, on the Plains of Abraham, and captured his daughter Pocahontas, whom he afterwards married with great pomp at Rome.

Men from their contact with the world get education of a certain sort, even if they do not read a book or newspaper; women have not this resource to any great extent, and if they neglect reading, they fall into depths of ignorance which are appalling.

The newspapers were filled with accounts of the epizootic, and also of incremation about two years ago. Still, after the subject had been discussed for weeks, I discovered a young lady, educated at home and in Europe, who thought that incremation was only another name for the horse-disease. She never read the papers; she had commenced her downward career. Another young woman, who had been out of school for four or five years, thought that a Jesuit was a person who had been converted from one religious belief to another. She had gone down hill a little farther. But the most remarkable case remains to be told. It did not come under my observation, but was related to me by a gentleman in whom I place confidence. A young lady was visiting friends in New York about the time that the war closed. The gentleman who told me the

story had been much pleased with her and often called on her. The evening after Lee's surrender he came in much excited, asking the young lady if she had heard the glorious news. She did not appear very enthusiastic, and he discovered that she actually did not know who Lee was. She thought she had heard of him but she could not say positively that she had. If the cases of the other girls I have mentioned were those of persons who were on the way down hill, surely this is a case where the bottom had been reached. These may all be extreme instances, indeed, I believe they are, but if any one wishes to try an experiment, let him ask the next woman he meets for some little account of Charles Sumner, Horace Greeley, or Andrew Johnson, and see what kind of an answer he will receive.

I do not mean to say that women are inferior to men in mental power. I think them equal, and have often inclined to believe them superior. The trouble is, that a woman's education too often ceases with her school days. This is, without doubt, a cause of much domestic unhappiness. A man may not wish to discuss the affairs of foreign nations with his wife, but he likes her to have some understanding of such subjects, should they be introduced. A mother should be as familiar with *David Copperfield*, *Little Nell*, and *Becky Sharp* as her children are. If she is not—if she cannot talk intelligently upon subjects which interest her husband and children—they will seek society elsewhere than at home.

Many women realize this, and make efforts to regain what they have lost. Often they fail, because they undertake too much. A woman, seized with a desire to "improve her mind," sits down to read Gibbon's "*Decline and Fall of the Roman Empire*." For a time she reads with zeal; then, after a few chapters, because she thinks she must, and finally she gives up the attempt. She had not read a book for a year; perhaps, and, instead of undertaking so great a work, should have read an interesting novel, or, if she wished to read history, should have taken up one of Parkman's works, or of Prescott's.

If you wish to take a course of reading, do not be too hard on yourself. Select a book which you can enjoy, and, after a time, as your taste improves, you can profitably read books which, at first, would have done you no good. After one is accus-

tomed to reading, it is well to pursue a plan. If, for instance, you wish to read the history of the United States, advise with some one who can tell you in what order to take up different authors. If left to yourself, you will very likely read the end first, then the beginning, and, last of all, the middle.

Where people have much leisure, reading clubs may be of service, but usually they are not. They are too apt to interruptions, and, even when they meet regularly, so much time is taken up in conversation, that comparatively little is accomplished. The better way is to read by yourself. If you have an hour or two a day, which you can devote to your books, take it, and let nothing interfere with it; but if you are not able to set aside a regular time, then read whenever you can. Have your book always at hand, with a card at your "place," so that you can immediately turn to it, and read during the odd minutes that you are obliged to wait for something or somebody. You will be amazed to find how quickly you can finish a book simply by reading "between-times."

D. M. K.

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*LINES BORROWED FROM A TEACHER'S
LETTER.*

* * * *

A VALUED friend used to say that teaching always reminded him of sausage-stuffing, one so frequently had more meat than cases to put it into. We have bigger and harder cases now-a-days. Modern boys can hold anything—but their own tongues. Well, let their jolly tongues wag on! Consciously and unconsciously, they say a great many odd things. One tells us that Julius Cæsar subjugated Gaul, quarreled with Pompey, pushed him into Greece, where he slipped up, etc., etc. Another quotes Scott in dead earnest thus:

"Oh who will cheer my *bony* bride,
When they have slain her lover?"

Another, when asked what brings fresh air into the room, answers, The wind does (meaning, no doubt, the windows). Still another tells us, That iron is so plentiful in Sweden, that the people make steamboats, railroads, and stone fences of it. Oh, the dear, blundering, good-for-nothing, good-for-everything, wicked, forgiving, confiding, cat-pegging, loving, and lovely wretches! What a warm place they have in all our hearts!

* * * *

COLLEGIATE ENTRANCE-EXAMINATIONS.

THE faculty and trustees of Harvard University have announced that an examination of candidates for admission will be held at Cincinnati, at the same time that examinations are proceeding at Cambridge. This arrangement is designed "for the convenience of students at the West who desire to enter Harvard, but are deterred by the expense of a long journey and the fear of a possible rejection."

The grace with which "our oldest university" descends into the arena of vulgar rivalry and makes a long arm "for the convenience of students at the West," is sure to excite admiration. Many varieties of cheap advertising have been discovered of late years, some of them indigenous to American soil; but this bright thought of Harvard marks the beginning of a new era, when the cultivation of the plant shall be encouraged by our institutions of learning and no longer left to the rude experiments of the "Philistine." Having for a time attracted attention by the high standard of proficiency demanded of students *before* their entrance upon her curriculum, and by the transcendent renown of those, her graduates, resident in Boston, who do most assiduously admire each other, the dear old lady-mamma has of late resorted to other devices. Not long ago she provided the "University Lectures," with the apparent expectation that all who loved letters would be glad to sit at her feet and learn, even if they had not been bred in her household. And when the well-nigh empty hall attested that this was not the short cut to world-wide fame, she graciously condescended to accord to women who asked admission, the cold comfort of a certificate that they had staid outside and yet learned something. And now fair Harvard says to the Great West, You, too, shall have a chance to know how much we know. As you beheld the skill of our oarsmen at Saratoga, you shall witness our competition with fresh-water colleges at Cincinnati.

This sending of the Harvard school-master abroad has been commented upon variously. A sportive correspondent of the *Independent* dares to suggest that he is in reality a "drummer," and that if colleges are to go on wheels we must call in some educational genius who shall adapt them to the Pullman idea.

Other writers take the ground that the odious comparison, brought to the very doors of western institutions by a more thorough examination than any of them require, will raise the standard of preparation and, indirectly, the requirements of regular academic courses.

We are sorry to say to these latter that they assume too much. We take it for granted that they are not speaking in disguise, in the interest of one college, but from a desire to elevate the general standard of collegiate education. This is plain from the fact that their praise of this movement has such an Athenian vagueness about it. It is an unknown god to whom they have set up an altar. They ignorantly worship "Harvard's standard," without asking what that standard really is. Ability to impart liberal culture of a high order is not the corollary of ability to put difficult questions. A severe entrance-examination does not preclude an easy-go-easy method of discipline afterward. It does not provide that the great learning, the educational skill, the accumulation of varied talent, of books and of museums, which unquestionably belong to Harvard, shall be brought to bear, as they should be, upon the average under-graduate. It does not even make sure that he shall have competent instruction. Going through college may mean nothing more, intellectually, than passing a good examination to enter, and spending four years in losing the habits of study by which preparation was acquired. The standing of a college should depend upon what is accomplished within it, not upon what is done in classical schools. The question to ask, therefore, is not, How much is demanded at Cambridge and Cincinnati? but, How much progress is made, for instance, in Latin prose composition, by the Harvard freshmen? Every one familiar with the drill which students undergo at Andover, East Hampton, Exeter, and other first-class academies, knows that in many colleges the study of Latin is for them simply all play and no work. Is it so at Harvard, or is it not so? let us ask, before we begin to cry, Great is Harvard of the Bostonians!

We have no desire to stimulate that local jealousy which grudges to this noble University legitimate praise. In learning, as in politics, local prejudices are contemptible. But it is to us a startling revelation, all the more so that it comes at the time

when Harvard would stretch her influence "for the convenience of students at the West," that one of her professors has publicly proved himself incompetent in so important a department as Latin composition. His "*Latin Composition*," "*Method*," and "*Key*," lately reviewed in the MONTHLY, are so inaccurate and misleading that they cannot stand before the educated public without extensive revision. It is an outrage that American parents who wish their boys instructed in Latin, should be deceived by loud talk about the "high standard" of education at Harvard, when its Professor of Latin puts forth, as an authority for the use of academies and colleges, a book full of ignorant blunders, and showing a very imperfect acquaintance with Latin usage.

Perhaps this unfortunate conjunction will give pause to the enthusiasm of those who have praised not only Harvard but also other colleges, simply on account of the difficulty of crossing their thresholds. If it has the effect to open some eyes to the popular error that the most richly endowed and most numerous officered institutions are not necessarily those where there is the most thorough instruction, and to discourage the growing tendency of some such colleges to resort to the arts of the showman, we shall not be sorry.

L. L. L.

SIGNS OF PROGRESS.

PROFESSORS VAN DYCK and ROCKWOOD, of Rutgers College, have just finished a very successful course of lectures on scientific subjects before a miscellaneous audience, in New Brunswick, N. J. The success was two-fold, in that the interest and intelligence of the community in regard to light, sound, electricity, etc., were greatly increased, thus bringing it into still closer sympathy with the work of the college, and also that the institution secured new apparatus, to the amount of six hundred dollars, the net income from the sale of tickets.

Wherever the faculty of a college can thus promote popular improvement in the community about their college, it is an advantage both to them personally as instructors, and as an example to the students under their charge. Too often the professor is tempted to forget that he is a citizen; too often

both he and his charge unconsciously shut themselves wholly away from the world of average men and women, and look with unwarranted condescension upon people who are not collegians, so that neither party learns, as both have need, from the other. The arbitrary distinctions which grow out of class-prejudice in university towns, are among the most unfortunate of the imperfections in our educational system. We are glad to see that Rutgers has taken one step towards remedying this state of things.

THE Board of Education in New York have made a good move in directing that a certain minimum allowance of floor surface and air space for each pupil shall not be diminished. The crowding of pupils cannot be counterbalanced, as regards the securing of proper ventilation, by any devices consistent with health and comfort. It is poor economy and bad morals to pack children so close that their cheeks are flushed, their feet cold, their minds made dull, and their nerves irritable. Much stupidity, and a great deal of bad temper and insubordination might be traced to the failure of imperfect systems of ventilation.

TEN fellowships have been provided by the Trustees of the Hopkins University, at Baltimore. The opportunity for graduates to pursue any extended and thorough course of culture, without the distractions of necessary money-making, have, thus far, been rare in this country. The sum of five hundred dollars a year is enough to enable such real students as are determined to seek knowledge for its own sake to do so without pecuniary embarrassment, while it is not enough to tempt the lazy, or to lessen the need of close economy.

THE highest salaries for public school-teachers are paid by the Cherokee Nation—\$225 monthly for men, and \$200 for women. The District of Columbia comes next, paying \$113 and \$75. Massachusetts shows a greater disproportion, paying \$93 and \$33. Not bad for the Cherokees.

REVERENCE the highest, have patience with the lowest. Let this day's performance of the meanest duty be thy religion. Are the stars too distant? pick up the pebble that lies at thy feet and from it learn all.—*Margaret Fuller.*

THINGS TO TALK ABOUT

CAPTAIN EADS, chief engineer of the jetty-works, at the mouth of the Mississippi, of which we gave some account last month, lately had the satisfaction of celebrating the anniversary of the passage of the act by Congress authorizing the enterprise, by sending to sea over the bar a vessel drawing thirteen feet of water. Soundings show that there are now over twenty feet where, formerly, there were only six or seven.

THE United States is gaining rapidly as a flax-growing country, and leading spinners in Europe and America are of the opinion that we shall soon compete successfully with Russia, which has been, hitherto, the chief dependence of flax importers. This is not improbable, in view of the fact that our exportation of wheat to Great Britain has reached fifty-eight per cent. of her whole importation, while Russia, the great wheat country of Europe, has fallen off from twenty-four to eleven per cent. The same soil that is favorable to wheat, is good for flax, and flax is the more profitable crop. In Morrow county, Ohio, flax yields \$27.08 per acre; wheat, \$14.51; corn, \$11.41, and oats, \$10.37. New machinery for preparing flax has lately stimulated its production. Prepared flax sells in New York for about \$300 a ton.

A WRITER in the *Popular Science Monthly* gives some account of the basins in the desert of Sahara, where it is proposed to make a great inland sea. The great desert was once under water, as is shown by the presence of marine shells. A large part of it is ninety feet below the sea level. The depression extends to within thirteen miles of the Gulf of Gabes, in the Mediterranean, from which it is separated by a bar of sand. The French wish to cut a canal, and fill up the immense hollow, in order to divert the caravan trade, now monopolized by Morocco and Tripoli, to Algiers. A port, upon the southern borders of the new-made sea, would attract all this trade; and thence, goods might be shipped across the lake, through the canal, to all Europe.

RHINOPLASTY, or the art of restoring lost noses, is one of those comparatively recent inventions at which the unthink-

ing laugh; but plastic surgery has already become well established in the "regular profession," and has made such progress, that the grafting of skin, of noses, and even of parts of the eye, is by no means uncommon among the ablest surgeons. Indeed, those knights of the lancet who lead this branch of scientific experiment, are discovering so many possibilities of "brilliant success," that it behooves no man to scoff. All of us are subject to accident and disease, and any of us may be glad enough to undergo operations that promise to restore us to physical integrity, even if it be that doubtful integrity, secured by the skill of Dubreuil, who took sections from the body of a Guinea-pig, and grafted it upon the cheek of an aged dame, with such success that, on healing, the part presented a "clean and healthy surface"—*beautiful*, he did not say. The cornea of the sheep has been, in a few cases, transplanted to the human eye, with the result of curing blindness temporarily; and but one step more is needed, ere bashful young men and maidens may cast "sheep's eyes" literally at each other, though we doubt if *their* blindness is within reach of human skill. This, and the kindred experiment of the transfusion of blood, are not yet perfected; but who shall prescribe their possible limits? It may be that at some not distant day, legislation shall be obliged to protect us against surgical abuses, such as the destruction of John Smith's identity by "transplanting" and "transfusing" so much of James Jones and Susan Brown, and of numerous rabbits and Guinea-pigs, that the poor fellow cannot claim himself, or maintain his rights as "a man and a brother."

THE materials for the first railroad in China are now on the way from England. The road is to extend between Shanghai and Woosung, a distance of nine and one half miles, and is to be completed by July next. It is hoped that this short line may do much to remove the intense prejudice of the Chinese against Railways, due not to the thing itself, but to the circumstance that railway engineers insist on the shortest routes regardless of local or national prejudices, hallowed grounds, and that sort of thing. The burial ground of his ancestors is particularly sacred to the Chinaman, and in thickly-settled districts it is impossible for railways to avoid passing, and therefore, in Chinese belief, profaning the holy places.

CURRENT PUBLICATIONS.

THE growing strength of moderate republican sentiment in France is leading many persons who have hitherto distrusted the stability of popular government in that country, to watch the efforts of its politicians with increasing interest and hope. The recent election of a Republican Legislature, and the quiet formation of a new ministry, are likely to promote inquiry as to the antecedents of the prominent personages belonging to those bodies, and Mr. King's volume,¹ therefore, makes a very timely appearance. It contains short but sufficiently minute sketches of such men as Thiers, Gambetta, Favre, Simon, the Duc de Broglie, the Duc d'Audiffret Pasquier, Bishop Dupanloup, Buffet, Grévy, etc., and thus gives, indirectly, a very good bird's eye view of the representative elements in French politics. One can hardly read recent French history without renewed astonishment at the sharp contrasts that reveal at once the surpassing strength and the surpassing weakness of that volatile people.

THE merits of the "Spectator" have been clouded by overpraise, for the whole rabble of admirers who like easy reading, and are delighted to find that they enjoy something which high authorities have already commended, have rained compliments upon it, without mercy or discrimination, for a century and a half. Some of the essays are not worthy of special praise; some have lost their interest for our age; but the few that are presented in "The Select British Essayists,"² edited by John Habberton, are those upon which the student of English Literature may profitably spend a share of his time.

ANOTHER Elementary Grammar³ has been presented to the public. To quote from the author's preface, "The sentence is our unit. Starting with the simplest, of two words, and bringing in gradually, one after another, all kinds of modifying words, phrases, and clauses, the pupil ascends by the easiest stages possible, to complex and compound sentences." This

¹ "French Political Leaders." By Edward King. G. P. Putnam's Sons, New York.

² G. P. Putnam's Sons.

³ "Graded Lessons in English." By Alonzo Reed and Brainerd Kellogg, A. M.

extract, notwithstanding its faulty construction and punctuation, gives an idea of the character and aim of the book. It is an elementary manual of analysis and synthesis, or, to use the author's pet word, of "sentence building," rather than of grammar. Grammatical principles, properly so called, are only here and there to be met with, and but briefly dwelt upon. The ear is wearied with such directions as these: "Build sentences by prefixing modified subjects to the following predicates;" "Build on each of the following subjects, three sentences," etc.; "Build these verbs into sentences," etc.; "Build a short sentence, containing all the parts of speech." And, after all this "building" is done, how much grammatical knowledge is acquired? To judge from the writers themselves, we fear that the pupils, after having reached the one hundredth lesson, may still be in deep ignorance of very many of the elements. Among the vague directions scattered through the book is this, on page 57: "*Caution*—Care must be taken to select the *right preposition*." Among the examples immediately following for correction, is this: "He divides his property between his four sons." But, long before we reached the 57th page, we found the authors themselves indulging in the same choice use of words; "We have distinguished *between four* things;" and again, "*Between* what *four* things did we distinguish," etc. But this is not all: the lessons are not so well "graded" as the authors would have us suppose. On page 49, they say that conjunctions "may connect clauses." But as to what "clauses" are, the pupil is left in blissful ignorance and without a "hint," till he reaches page 75—that is, for twenty-six pages! And even then it is doubtful whether he obtains a correct idea of them; for there a clause is defined to be "a part of a sentence containing a subject and its predicate." No illustration, as usual, is given with this definition, and the pupil, we will suppose, casting his eye on the opposite page, takes example 11, "Jonah, the prophet, preached to the inhabitants of Nineveh," and says to himself, "Then, *Jonah preached* must be a clause, for it is 'a part of a sentence, containing a subject and its predicate.'" Then, on page 81 he is befogged by finding, not that "a part of a sentence," but that "the whole sentence" is sometimes a clause, as in examples like this: "That stars are suns is taught by astronomers." The treat-

ment of *that*, too, in the sentence just given—"call it a conjunction"—looks very much like the *dernier ressort* of one who sees that the word connects nothing, and yet is forced to give it a name. In a word, the definitions generally, though brief, are very incorrect; the arrangement might be improved, and the number of lessons be greatly reduced; the treatment of the infinitive, making *to* a preposition, is absurd; the treatment of the subjunctive, though it is not liable to make a very deep impression, is false; the misuse of the definite article on almost every page is glaring; several of the examples of "errors to be corrected" are so much worthless rubbish, because never made by children; the few rules of syntax that are thrown in here and there, are so stated, and so briefly illustrated, as to be of but little or no practical value; and, to say nothing of anything else, the punctuation, as may be seen from the few quotations we have made, is not faultless. But, however far short the book may come of being a model of Elementary English Grammar, it may be—we presume it is—a very practical treatise on "sentence-building." It certainly is very neatly printed, and presents a pleasing appearance.

THE author of this book¹ has presented the public with a bushel of chaff—that is to say, of Congressional "wit and humor." In it there are a few grains of wheat which the patient reader, anxious to be amused, may pick out, though the bulk of the volume is made up of sayings that are neither very witty nor very wise.

FEW men have shown themselves so capable and thorough in the handling of financial topics as Mr. David A. Wells. This *brochure*,² illustrated by Nast, sets forth the "hard-money doctrine" in the attractive form of a story. The history of the supposed island community is analogous, as regards the use of money, to the history of all nations. The same gradual progress from barter to the use of an intermediate commodity, the same mistakes in the choice of it, and the same success in adherence to sound principles of exchange that have characterized commercial life, are here vividly reproduced in miniature. The work is well done as respects the simplifying of the subject-matter; as a "story" it would not take the prize anywhere.

¹ Why we Laugh. By Samuel S. Cox. Harper & Brothers.

² Robinson Crusoe's Money. Harper & Brothers.

CATALOGUES AND PAMPHLETS RECEIVED.

College Hill Seminary for Young Ladies, Poughkeepsie, N. Y. C. C. Wetsel, Principal; fifty students.

Alexander Institute, White Plains, N. Y. Oliver R. Willis, Principal. Names of students not given.

Naples Academy, Naples, N. Y. Charles H. Davis, Principal; one hundred and forty-nine students.

Remsen Street School and Kindergarten. Miss J. S. Gragian, A.M., Principal. This institution has adopted Froebel's motto: "Come, let us live for our children." Number of pupils sixty-seven.

Northwestern Normal School and Commercial Institute, Kentland, Ind. Mr. B. F. Niesz, Superintendent; three hundred and sixty-four students.

Cornwall Heights School, Cornwall Heights, N. Y. Orew Cobb, Principal.

Thomasville Female College, Thomasville, N. C. H. W. Reinhart, Principal; forty-nine pupils.

Pamphlet from William E. Hale & Co., manufacturers of Water Elevators, N. Y. City and Chicago.

Catalogue of Books from Cassell, Petter & Galpin, 596 Broadway, N. Y.

Pamphlet, Ornamental and Useful Plants of Maine. By F. Lamson. Scribner, B. S.

Trade Price List of Anderson & Cameron, manufacturers of Stationers' Goods.

Annual Report of the Board of Education of District No. 1, Denver, Colorado.

Circular of Information, No. 4, from Bureau of Education.

PUBLISHERS' DEPARTMENT.

Venable's Elements of Geometry, after LEGENDRE. A marked improvement on previous works. Philosophical in arrangement, concise and clear in demonstration. Each book has an admirable series of Exercises, with Hints to Solutions in Appendix.

Descriptive Circulars sent on application.

Address University Publishing Co., 155 and 157 Crosby Street, New York.

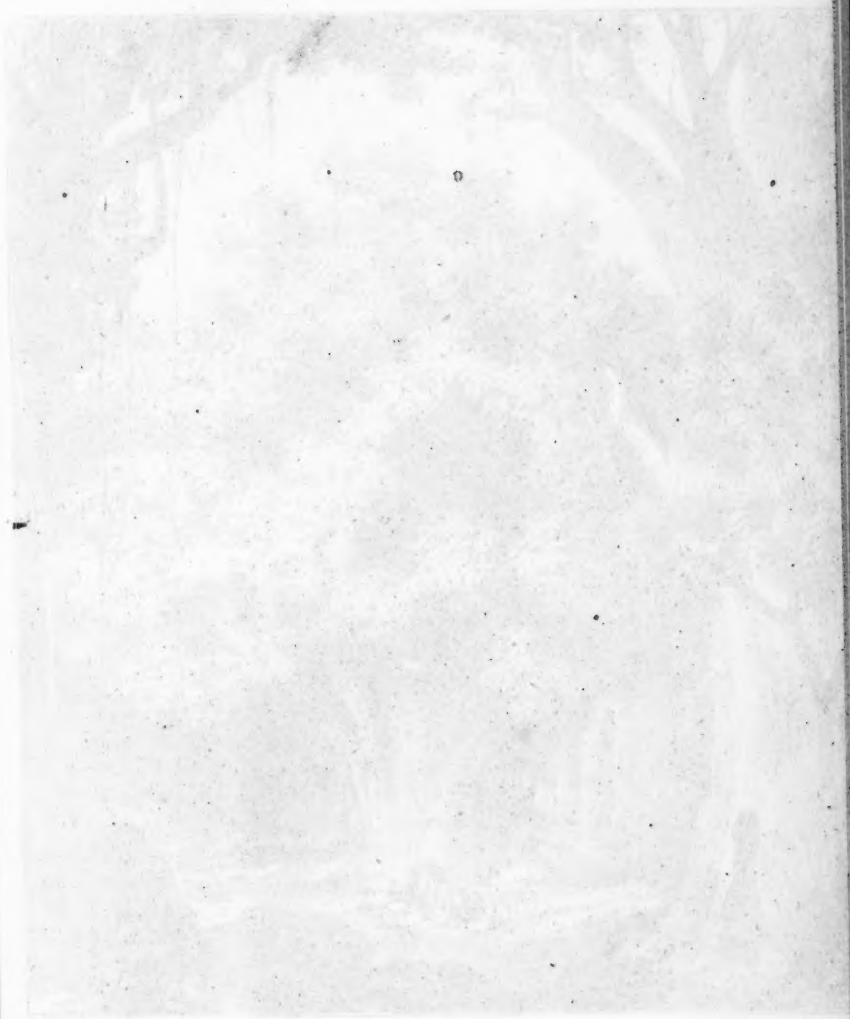
Messrs. P. Garrett & Co., of Philadelphia, Penn., have just issued the **Twelfth** number of their "100 Choice Selections," and it seems to be fully up to the standard of these very meritorious publications. If you want "something new to speak," get it at once. The third volume of "The Speaker's Garland" is also ready. See advertisement on another page.

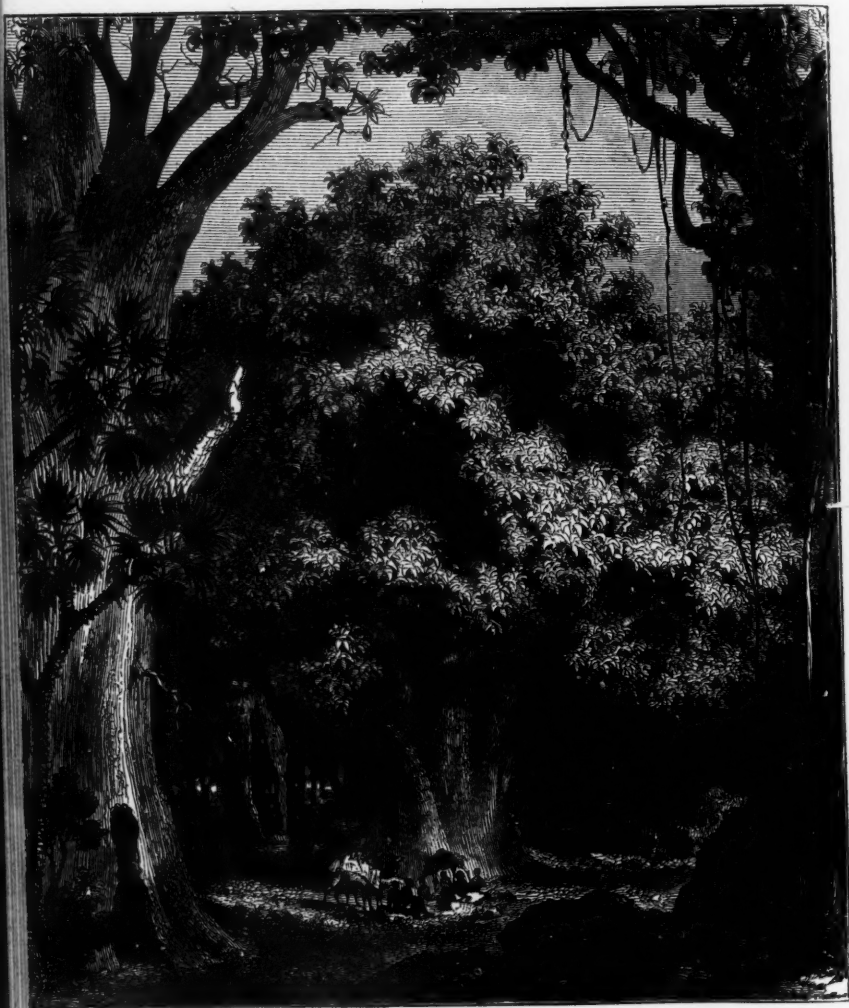
"**A Century of Presidents.**" SEND T. S. ARTHUR & SON, PHILADELPHIA, 25 cents for a copy of their beautiful little book, "**The Lives and Portraits of all the Presi-**

dents from Washington to Grant," which contains, also, The Constitution of the United States, with all the amendments. See advertisement.

The Art of Reading Music, by Mrs. L. B. Humphreys, is meeting with enthusiastic approval wherever Mrs. Humphreys has tested its use with a class in the school-room. Her system is natural and most successful. It will enable pupils to learn to read music at sight, as readily as they learn to read the first lessons of their primers. The day is not distant when Mrs. Humphreys' plan will be recognized as revolutionizing the art of teaching music in our schools.

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